UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,140	06/21/2005	Hirokazu Nunokawa		8876
23373 SUGHRUE MI	7590 03/02/2007 ON PLLC	EXAMINER		
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			NGUYEN, LAMSON D	
			ART UNIT	PAPER NUMBER
	,	•	2861	
	1	4.17		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS		03/02/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)	
Office Action Summary	10/540,140 NUNOKAWA, HIROK		
Onice Action Summary	Examiner	Art Unit	
The MAILING DATE of this communication ap	Lamson D. Nguyen	2861	
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPL		•	
WHICHEVER IS LONGER, FROM THE MAILING I  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period  Failure to reply within the set or extended period for reply will, by statuly Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC .136(a). In no event, however, may a red d will apply and will expire SIX (6) MON te, cause the application to become AB	CATION.  eply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on			
	is action is non-final.	•	
3) Since this application is in condition for allowa	ance except for formal matte	ers, prosecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-14 is/are pending in the application	n.		
4a) Of the above claim(s) is/are withdra	awn from consideration.		
5) Claim(s) is/are allowed.	v	·	
6)⊠ Claim(s) <u>1-14</u> is/are rejected.			
7) Claim(s) is/are objected to.	lor alastian raquirament		
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examin			
10)☐ The drawing(s) filed on is/are: a)☐ ac			
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the corre		•	
Priority under 35 U.S.C. § 119			
12) 🗹 Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. §	3 119(a)-(d) or (f).	
a)⊠All b)□ Some * c)□ None of:	ala bana bana na sa		
1. Certified copies of the priority documer		pullication No	
<ul><li>2. Certified copies of the priority documer</li><li>3. Copies of the certified copies of the pri</li></ul>			
application from the International Bure		received in this National Stage	
* See the attached detailed Office action for a lis		received.	
det the diddined detailed office detailed to	x o, and common copies not		
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) 🗍 Interview S	Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		s)/Mail Date	

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date <u>06/21/05</u>.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_.

Application/Control Number: 10/540,140

Art Unit: 2861

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto et al. ( JP 2003-025563).

# Goto et al teach an inkjet printing apparatus comprising:

### Claim 1:

- a liquid ejecting section that ejects a plurality of types of liquid toward a medium (figure 1)
- wherein among the liquids that are ejected from said liquid ejecting section and that reach a region that is outside said medium, an ejection amount of one or more types of said liquid is reduced (figure 5, paragraph 51)

# Claim 2:

wherein among said liquids that are ejected from the ejection section and that
reach said region that is outside the medium, an ejection amount of said one
or more types of said liquid is reduced such that the amount becomes zero
(paragraph 68 teaches controlling <u>not</u> to carry out reaction mixture outside
the media, inherently means that zero amount of liquid is ejected)

Art Unit: 2861

# Claim 3:

wherein said one or more types of said liquid includes a liquid whose
permeability is lower than another type of liquid that is ejected from said liquid
ejecting section (paragraph 63 teaches cationic black ink and anionic color
ink, therefore one type of ink is more permeable than the other)

### Claim 4:

wherein said one or more types of said liquid includes a liquid whose
permeability is the lowest of all of the types of said liquids that are ejected
from said ejecting section (paragraph 63 teaches cationic black ink and
anionic color ink, therefore one type of ink is more permeable than the other)

# Claim 5:

 wherein said one or more types of said liquid includes a liquid whose permeability of another type of liquid that is ejected from the ejecting section on contact therewith (paragraph 63)

### Claim 6:

wherein said one or more types of said liquid includes a liquid that lowers
permeability of another type of liquid that is ejected from the liquid ejecting
section on contact therewith (paragraph 63)

Claim 7:

wherein said one or more types of said liquid includes a liquid that

accelerates coagulation of another type of liquid that is ejected from the liquid

ejecting section (paragraph 63, when an aniotic ink mixes with a cationic ink,

coagulation takes place, as is well-known in the art)

Claim 8:

wherein there are a plurality of types of said one or more types of said liquid

(figure 1 teaches black, cyan, magenta, and yellow inks)

Claim 9:

a liquid recovery section that recovers liquid that has missed the medium

(figure 6)

Claim 10:

a liquid recovery section that recovers liquid that has missed the medium,

wherein said liquid recovery section is provided with an absorbing material for

absorbing said liquid that has been recovered (paragraph 50)

Claim 11:

wherein said liquid is ink (figure 1, inkjet head utilizing inks of black, cyan,

magenta, and ink)

Application/Control Number: 10/540,140 Page 5

Art Unit: 2861

### Claim 12:

a liquid ejecting section that ejects a plurality of inks toward a medium (figure
 1 teaches head ejecting inks of black, cyan, magenta, and yellow)

- an ejection control section that controls ejection of said liquid from the liquid ejecting secion (figure 9)
- wherein said ejecting section attempts to eject said liquid into a region that is determined to be outside the medium, said control section prevents one or more types of liquid from being ejected into said region that is determined to be outside the medium (figure 5, paragraph 51)

### Claim 13:

reducing an ejection amount of one or more types of said liquid that reach a
 region that is outside the medium (figure 5, paragraph 51)

### Claim 14:

- a computer (figure 9)
- a liquid ejecting apparatus that is connectable to the computer the apparatus comprising: a liquid ejecting section that ejects a plurality of types of liquid toward a medium (figure 1, inkjet head using black, cyan, magenta, and yellow inks), wherein among the liquids that are ejected from the ejecting

section that reach a region that is outside a medium, an ejection amount of one or more types of liquid is reduced (figure 5, paragraph 51).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is 571-272-2259. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luucan be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

\*\*\*

LAMSON NGOYEN SMARY EXAMINER